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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,016	12/08/2003	Toru Aoyama	117996	9124
25944	7590	06/15/2005		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER CUEVAS, PEDRO J	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/729,016

**Applicant(s)**

AOYAMA, TORU

**Examiner**

Pedro J. Cuevas

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/8/03</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 5 recites the limitation “as claimed in claim 5” in line 1. There is insufficient antecedent basis for this limitation in the claim. The examiner has assumed that Claim 5 depends from Claim 2 to comply with antecedent basis requirements, and along with Claims 6-9, have been examined accordingly.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,140,915 A to Iwatani.

Iwatani clearly teaches the construction of an alarm apparatus for vehicle onboard AC generator (1) including a field coil (10) and a battery (5) comprising:

a voltage regulator (3) for regulating an output voltage of said ac generator to a regulation voltage;

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a comparator (44) for providing a first signal when the output voltage of the ac generator is equal to or lower than the regulation voltage and higher than a predetermined voltage which is higher than voltage of said battery when said battery is open;

means (49) for alarming when said comparator does not provide the first signal and a holding circuit (4A) for holding said alarming means inoperative after the generator is operated and said comparator provides the first signal and a second switch controlled by said holding circuit;

wherein:

said voltage regulator comprises a first switch (31) having an output terminal connected to the field coil,

the predetermine voltage of said comparator is equal to the regulation voltage so that said comparator provides a regulation voltage signal to turn on or off said first switch to control current supplied to the field coil when the output voltage becomes higher than the regulation voltage, and

the first signal is formed from the regulation voltage.

6. With regards to claims 10-14, Iwatani also discloses a generator control circuit () of an ac generator (1) for charging a battery (5) which includes a field coil (10), said generator control circuit comprising:

output control means (3) for providing a first control signal to reduce current supplied to the field coil when the output value of the generator is higher than a

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regulation value (VR1) and a second control signal to increase the current supplied to the field coil when the output value of the generator is lower than the regulation value;

control switching means (4A) for maintaining a first control operation until said output control means provides the first control signal and changing from the first control operation to a second control operation when said output control means provides the second control signal;

wherein:

said output control means comprises a first comparator (44) which compares the output value of the generator with the regulation value, and

said control switching means comprises:

a first switch (31) which controls field current supplied to the field coil according to an output signal of said first comparator,

holding means (40) for holding said second control operation after said output control means provides the first control signal, and

a second switch (43) which operates according to a condition of said holding means;

a second comparator (33) for comparing the field current with a reference value and an OFF circuit which provides an output signal to control said first switch for a predetermined period.

***Allowable Subject Matter***

7. Claims 5-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter.

The prior art of record, taken alone or in combination, does not teaches the construction of a generator control circuit as described on independent claim 5, further comprising:

a discrimination circuit connected to the field coil, wherein said discrimination circuit provides a signal for resetting said holding circuit to hold said alarming means operative if field current is not controlled by said first switch irrespective of the first signal.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (571) 272-2021. The examiner can normally be reached on M-F from 8:30 - 6:00.

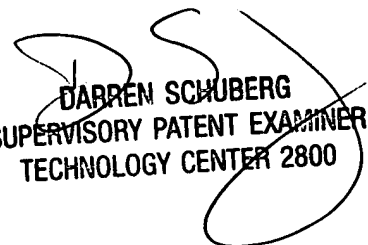
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pedro J. Cuevas  
June 13, 2005



DARREN SCHUBERG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800